

Mathematics - S3 Information sheet

This is information about the S3 Maths course that your child will follow this year. It will help you to support your child throughout the course, so that we can work together to ensure your child reaches his/her full potential.

Maths and numeracy are important in all aspects of life, whether for everyday life skills, preparation for learning a trade or work in business, engineering, science or technology. It is often a requirement of college and university courses.

Pupils in S3 continue to follow a Curriculum for Excellence course in Mathematics, studying work under the following headings:

- Number, money and measure
- Shape, position and movement
- Information handling

Pupils will cover Experiences and Outcomes (Es and Os) at level 3 and/or level 4. Numeracy topics are highlighted, as these skills will be used across the curriculum and pupils will be expected to use them in other subjects.

The course at which pupils will be presented for in S4 will be decided during S3 based on coverage of Third and Fourth level Experiences and Outcomes.

National 4 is suitable for learners who have experienced breadth and depth of learning across the Maths Es and Os.

National 5 is suitable for learners who have experienced breadth and depth of learning across the Maths Es and Os

and can respond to a level of challenge and who can apply what they have learned in new and unfamiliar situations.

The attached calendar gives an idea of the topics we will be covering across the year. It may be necessary to change timings of some topics. Test dates may also change but we will inform pupils well in advance of any tests.

Be Prepared

Pupils should bring to class every lesson: pencil and rubber, ruler, **scientific calculator**, maths jotter, maths textbook (if issued).

Optional equipment (used occasionally): pair of compasses, protractor.

Homework and Study

Formal homework on each topic will be issued approximately every 2 weeks. Pupils will also be expected to complete further exercises as the class teacher feels appropriate e.g. finishing work begun in class or mixed questions exercises. If homework is not completed on time, or if little effort has been put into homework, the department will send home a 'homework letter' to alert you to this. Pupils may also be given online homework.

Pupils will be expected to study throughout the course; it should not be left until just before tests or exams. A good example would be to study twice a week for half an hour at a time. Study should include looking over work covered in class, making revision notes, using recommended websites, completing extra work from a textbook or revision material issued. Some interactive revision, consolidation and extension material is available. The department hopes to continue to offer Supported Study classes on a Monday and Wednesday lunchtime. We keep a register of attendance at Supported Study.

Assessments

Assessments are indicated in the attached calendar but the class teacher may set other tests to check understanding of various topics. Pupils will be issued with a profile booklet or individual sheets prior to assessments highlighting success criteria for each topic covered in class. It provides examples to check understanding. Pupils are also encouraged to record their progress with Literacy and Health and Wellbeing experiences and outcomes.

After each assessment pupils will complete an evaluation sheet on which the class teacher may make a comment.

Pupils will then bring this home for a comment and signature from a parent/carer.

S3 third level course (subject to change)		
Week	Topic	Numeracy
1	Angles and Shape	
2	Angles and Shape	
3	Scientific notation	
4	Algebra - brackets and equations	
5	Algebra - brackets and equations	
6	Distance, speed and time	√
7	Distance, speed and time	√
8	Revision and Block 8 test	
	October Holiday	
9	Fractions, decimals and percentages	√
10	Fractions, decimals and percentages	√
11	Negative numbers	√
12	Pythagoras' Theorem	
13	Pythagoras' Theorem	
14	Money - wages, bills, foreign exchange	√
15	Money - wages, bills, foreign exchange	√
16	Scale drawing - enlarge/reduce	
17	Revision	
	Christmas Holiday	
18	Statistics - inc. mean, mode, median and range	√
19	Statistics	√
20	Revision and Block 9 test	
21	Simplify expressions, substitution	
22	Common factors, factors	
23	Number patterns	
24	Number patterns	
25	Circle - circumference and area	√
26	Circle - circumference and area	√
27	Area - quadrilaterals	
28	Numeracy assessment	
29	Nets	
	Easter Holiday	
30	Surface area	
31	Volume of prisms	
32	Volume of prisms	
33	Gradient	
34	Probability	√
35	Revision of Statistics - frequency tables	√
36	Charts and graphs	√
37	Symmetry	
38	Revision of EF unit	
39	Assessment of EF unit	
40	% increase and decrease	

S3 fourth level course (subject to change)		
Week	Topic	Numeracy
1	Pythagoras' Theorem	
2	Pythagoras' Theorem	
3	Algebra - brackets and equations	
4	Algebra - brackets and equations	
5	Distance, speed and time (with Scientific notation)	√
6	Percentages - app/dep, working back	√
7	Consolidation week	
8	Revision and Block 8 test	
October Holiday		
9	Area	
10	Area and Volume	
11	Co-ordinates, symmetry and transformations	
12	Similar Shapes	
13	Similar Shapes - areas and volumes	
14	Consolidation week	
15	Trigonometry	
16	Trigonometry	
17	Straight line - drawing from the equation	
Christmas Holiday		
18	Simultaneous equations	
19	Simultaneous equations	
20	Consolidation week	
21	Revision and Block 9 test	
22	Fractions (+/-/x/÷)	√
23	Making and using formulae and number patterns	
24	Algebra (multiply out include trinomial)	
25	Inequalities and equations (with fractions as solns)	
26	Factorising	
27	Factorising	
28	Numeracy assessment	√
29	Scientific notation problems	
Easter Holiday		
30	Change the subject of a formula	
31	Length of arc and area of sector	
32	Completing the square	
33	Algebraic fractions	
34	Surds and Indices	
35	Surds and Indices	
36	Gradient of a straight line	
37	Volumes of sphere, cone and pyramid	
38	Testing - Expressions and Formulae unit	
39	Consolidation week	
40	Consolidation week	